--**ABSTRACT**

The present invention provides a process for producing a target fermentation product. This process includes providing a fermentation medium containing a recombinantly-produced microorganism that over-produces a fermentation product and contains a mutation which causes auxotrophic growth of the microorganism wherein the auxotrophy within the microorganism does not compromise the ability of the microorganism to produce the fermentation product. The medium is then supplied in excess with all substrates required for production of the fermentation product and in growth limiting amounts with a substrate complementing the auxotrophy. Host cells, vectors, and polynucleotide sequences used in the process are also provided. The polynucleotide sequences of the present invention include sequences derived from the biotin operon of *B. subtilis* and in particular the *bioFDB* gene cassette.--